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PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number (Optional)
4366-106

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)]

on July 29, 2008

Signature Leslie M. Frankel

Typed or printed name Leslie M. Frankel

Application Number	Filed
10/673,118	2003-09-26
First Named Inventor	
Andrew D. Flockhart	
Art Unit	**Examiner**
3676	WAI, ERIC CHARLES

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).
Note: No more than five (5) pages may be provided.

I am the

- [ ] applicant/inventor.
- [ ] assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)
- [X] attorney or agent of record. Registration number 44,189
- [ ] attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____

Signature

Bradley M. Knepper
Typed or printed name

(303) 863-9700
Telephone number

July 29, 2008
Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

- [ ] *Total of _____ forms are submitted.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

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7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re the Application of:	Group Art Unit: 3676
FLOCKHART et al.	Examiner: WAI, ERIC CHARLES
Serial No.: 10/673,118	Confirmation No.: 9237
Filed: September 26, 2003	REASONS SUPPORTING PRE-APPEAL BRIEF REQUEST FOR REVIEW
Atty. File No.: 4366-106	
For: "METHOD AND APPARATUS FOR LOAD BALANCING WORK ON A NETWORK OF SERVERS BASED ON THE PROBABILITY OF BEING SERVICED WITHIN A SERVICE TIME GOAL"	

CERTIFICATE OF TRANSMISSION

I HEREBY CERTIFY THAT THIS CORRESPONDENCE IS BEING TRANSMITTED VIA THE OFFICE ELECTRONIC FILING SYSTEM IN ACCORDANCE WITH 37 CFR §1.6(a)(4) ON July 29, 2008

SHERIDAN ROSS P.C.

BY: Leslie M. Frankel

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

The following sets forth Applicants' Reasons in Support of the Pre-Appeal Brief Request for Review submitted herewith.

The Examiner's objections omit essential elements needed to reject the pending claims. In particular, the cited references do not teach, suggest or describe a system or method in which a probability of servicing a work request within a target time is calculated for each of a plurality of service locations by calculating a number of opportunities to service the work request within the target time by each service location included in the plurality of service locations as generally claimed. Accordingly, it is submitted that all the claims are in condition for allowance.

The Examiner rejects Claims 1-3, 6-7, 13, 16-17, 20, 24-26 and 28 as being unpatentable under 35 U.S.C. §103 by U.S. Patent No. 7,013,344 to Megiddo. In addition, Claims 14, 18 and 21-23 stand rejected under 35 U.S.C. §103 as being unpatentable over Megiddo in view of Applicant's admitted prior art. Finally Claims 8-12, 19 and 29-34 stand rejected under 35 U.S.C. §103 by Megiddo in view of U.S. Patent No. 5,506,898 to Costantini, et al. ("Costantini"). In

order to establish a prima facie case of obviousness under §103, there must be some suggestion or motivation to modify the reference or to combine the reference teachings, there must be a reasonable expectation of success, and the prior art reference or references must teach or suggest all the claim limitations (MPEP §2143.) However, all of the claim elements cannot be found in the cited references, whether those references are considered alone or in combination. Accordingly, reconsideration and withdrawal of the rejections of the claims as obvious in view of the cited references are respectfully requested.

The claimed invention is generally directed to a method and system that balances resource loads for a plurality of service locations. More particularly, the claims recite the computation of a relative probability of servicing work requests for each service location included in a plurality of service locations. Work requests are then assigned to a service location based on the determined relative probabilities, allowing work to be efficiently routed. Moreover, the pending claims generally require determining a relative probability by calculating a number of opportunities to service the work request within a target time by each service location included in the plurality of service locations. There is no disclosure in any of the cited references of determining a number of opportunities to service a work request within a target time as claimed. Therefore, all of the claim elements are not disclosed by the cited references, and the claims should be allowed.

The Megiddo reference is generally directed to a massively computational parallizable optimization management system and method. More particularly, Megiddo discusses a distributed processing system that allows interested participants to register and provide a commitment to make excess computer capacity available. (Megiddo, abstract.) The Office Action acknowledges that Megiddo does not explicitly teach that the relative probability of servicing a work request within a target time is determined by calculating a number of opportunities to service the work request within the target time for each service location in a plurality of service locations. Nonetheless, the Office Action finds that the claims are obvious, on the grounds that "one of ordinary skill in the art would realize Megiddo's teaching of effective capacity (col. 4, ll. 24-28) would be analogous to a number of opportunities, since having a higher capacity allows for more opportunities to operate on the work request." (Office Action dated April 29, 2008, p. 4.) This finding is improper and is not a proper basis for an obviousness rejection.

The claimed invention provides a specific mechanism by which a relative probability with respect to servicing work by service locations is calculated. A finding that this specific mechanism is not patentable because a different mechanism that arguably achieves a similar result is disclosed is improper, for at least the reason that each and every element recited by the claim is not disclosed by the prior art. Moreover, such a finding ignores the particular advantages that are available as a result of the specific mechanisms set forth by the claims. For example, the claims specify that a relative probability is determined by calculating a number of opportunities to service a work request within a target time. Therefore, the claims specify a relatively simple, and therefore computationally efficient, process or mechanism for determining the specified probability.

The statement in the Office Action that Megiddo's teaching of effective capacity would be analogous to a number of opportunities since having a higher capacity allows for more opportunities to operate on the work request may be true at some level of abstraction. However, it does not amount to a disclosure of the specific claim elements recited by the pending claims. Therefore, the rejections of Claims 1-3, 6-7, 13, 16-17, 20, 24-26 and 28 as obvious in view of Megiddo should be reconsidered and withdrawn.

In addition, it is noted that the Examiner has not identified a motivation to modify the Megiddo reference. Moreover, as Megiddo is directed to massively parallel computing, one of skill in the art would not modify that reference for application to a system in which a probability is calculated in connection with selecting a service location. Therefore, the rejections of the claims should be reconsidered and withdrawn for at least this additional reason.

The Office Action rejects Claims 14, 18 and 21-23 as being unpatentable over Megiddo in view of Applicants' admitted prior art. In particular, the Office Action finds that the Applicants' admitted prior art teaches the use of agents in call center systems. Initially, Applicants note that the Applicants' admitted prior art may, as suggested by the Office Action, motivate one of skill in the art to group service locations according to skills and capabilities to target work requests. However, the Office Action does not establish a motivation to combine the Applicants' admitted prior art with the Megiddo reference. In particular, as stated in the Office Action, the Applicants' admitted prior art is directed to call center systems. In contrast, Megiddo is directed to executing a computer program distributed across a plurality of computers. (Megiddo, abstract.) In addition, even if Megiddo is combined with Applicants' admitted prior

art, such a combination does not provide a disclosure of determining a relative probability of servicing a work request within a target time by calculating a number of opportunities as explicitly recited by the claims. Therefore, the rejections of Claims 14, 18 and 21-23 as obvious should be reconsidered and withdrawn for at least these reasons.

Claims 8-12, 19 and 29-34 stand rejected over a proposed combination of the Megiddo and Constantini references. The Constantini reference is cited for teaching the use of an average rate of advance in determining an estimated wait time in queue. Initially, Applicants note that the Office Action does not establish any motivation for combining the Megiddo and Constantini references. Instead, the Office Action asserts that it would be obvious to one of skill in the art to use a weighted advance time or average rate of advance as discussed by Constantini to produce a more accurate estimate of how long an item would have to wait in a queue before being serviced. However, since Constantini is directed to an automated call distribution system that estimates the time that a caller will have to wait before reaching an agent, while Megiddo is directed to massively parallel computing and determining whether a task will complete, there is no motivation to combine the Megiddo and Constantini references.

Moreover, even if the Megiddo and Constantini references are properly combinable, such a combination would not result in the claimed invention. The Costantini reference is cited in the Office Action for using an average rate of advance in determining the estimated wait time in a queue. Although Costantini does discuss determining a wait time for an item in a particular queue, there is no disclosure of a target time or a relative probability for a service location that is determined by calculating a number of opportunities to service a work request within a target time at a service location in the Costantini reference. In particular, combining the parallel computing scheme of Megiddo with the weighted advance time of Costantini does not result in a teaching of the claimed calculation of a number of opportunities to service a work request within a target time, or the specific equation recited by at least some of the claims. Accordingly, even if the Costantini reference were combined with Megiddo, each and every element of the pending claims is not taught, suggested or described by the prior art. Therefore, the rejections of Claims 8-12, 19 and 29-34 as obvious should be reconsidered and withdrawn.

Claims 16-19 and 20-25 stand rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. In particular, the Office Action states that Claims 16 and 20 recite an apparatus, however, the Office Action finds that the system would reasonably be interpreted by

one of ordinary skill in the art as software per se. Applicants note that Claim 16 is in means plus function form, which requires that the recited "means for" be modified by functional language (MPEP §2818). Moreover, the structure disclosed by the specification as being associated with various of the recited means includes hardware components. In addition, in interpreting a means plus function claim, "the PTO may not disregard the structure disclosed in the specification corresponding to such [means plus function] language when rendering a patentability determination." (MPEP §2181, quoting In re Donaldson Co., 16 F.3d 1189, 29 USPQ2d 1845 (Fed. Cir. 1994)). Accordingly, the rejection under 35 U.S.C. § 101 of Claims 16-19 should be reconsidered and withdrawn.

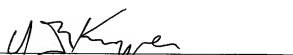
Claim 20 recites various hardware components, including a controller that operates to perform various functions. As is known by those of ordinary skill in the art, a controller is a hardware component that can (but need not) execute software instructions. Moreover, the assertion in the Office Action that Applicants' invention is software per se is simply incorrect. For these reasons, the rejections of Claims 20-25 as being directed to non-statutory subject matter should also be reconsidered and withdrawn.

Because the references cited by the Examiner do not teach, suggest or describe a system or method in which a number of opportunities to service a work request within a target time is calculated as claimed, essential elements required for a rejection of the claims have been omitted by the Office Action. Therefore, the rejections of the claims in view of the cited references should be reconsidered and withdrawn, and the claims allowed.

The pre-appeal brief conference participants are invited to contact the undersigned by telephone if there are any questions or if doing so would expedite the resolution of this matter.

Respectfully submitted,

SHERIDAN ROSS P.C.

By: 

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Date: July 29, 2008